'Published Works in the electronic age: recommended amendments to Articles 8 and 9 of the Code'—comment on general article by J.D. Harris

(General Article, see BZN 61: 138-148)

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There is much uncertainty amongst taxonomists as to how to deal with the increasing number of papers that are pre-published electronically on the World Wide Web, sometimes many months before the paper version is available. This uncertainty is unnecessary since Article 9.8 of the Code explicitly states that web-publications are to be treated as unpublished for nomenclatural purposes and there is no recommendation in the Code suggesting the withholding of new names until they are published formally. The journal *Systematic Entomology* (which we edit) has joined the electronic pre-publication service of its publisher Blackwell, OnlineEarly (Cranston & Krell, 2005). However, in recognition of some unease amongst taxonomists concerning web-publications being unpublished for nomenclatural purposes, we offer our authors the choice to withhold their paper from electronic pre-publication. Indeed, authors of one paper so far have opted for this delay.

Recently, Taylor & Francis have withdrawn the *Journal of Natural History* from their electronic pre-publication service ('prEview'), because of the same uncertainty (A. Polaszek, pers. comm.). We consider it disadvantageous for taxonomic progress and detrimental for the reputation of both taxonomy and the Commission if an Article of the Code delays publication of taxonomic results, in times when electronic pre-publications in other sciences increasingly become a major source of information.

The uncertainty amongst authors (and publishers) would end if electronic prepublications were accepted as published by the Code, provided there is some strict regulation as suggested by Jerald Harris in his general article published in the *Bulletin*. Thus we support the validation of web-based documents only if registered with a DOI number (Digital Object Identifier, Paskin, 2004; http://doi.org) and followed by an identical paper publication. The World Wide Web has proved to be a very volatile archive (Dellavalle et al., 2003; Whitfield, 2004), and electronic archiving projects already suffer from ever-changing standards and formats of electronic documents (Malvern, 2004). Harris's proposal addresses these provisions and is a very sensible and timely step forward for nomenclature.

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Comment on the neotypification of protists, especially ciliates (Protozoa, Ciliophora) (General Article, see BZN 59: 165–169; 60: 48–49, 143, 216–217; 61: 39–40)

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The usefulness of neotypes in modern protistan systematics is not in dispute and we also applaud the principle of redescribing existing taxa, rather than creating new names that so often add to nomenclatural confusion. Nonetheless, we argue that Foissner's proposal is rather more liberal than is desirable.

First, although protistologists often talk about the ciliates and other protists as being ubiquitous (Finlay, 2002), there remains reasonable doubt that it is really and universally so. The crux of the argument depends on how the species are defined. Many morphospecies are demonstrably cosmopolitan, but there are several examples of species not having yet been found outside a particular geographical region. Certain species of the ciliate *Blepharisina* (*B. japonicum*, *B. stoltei* and *B. brevifiliformis*) have never been found in the Americas (Giese, 1973). The sibling species of *Tetrahymena* are biochemically, and therefore genetically, distinct despite being extraordinarily difficult to distinguish morphologically (Gates & Berger, 1976). Restricted geographical distributions have also been assigned to several other taxa of ciliates and testate amoebae (Foissner, 1999, 2003; Foissner & Song, 2002; Foissner et al., 2002).

The purpose of neotypification is to fix the nomenclatural type of a given taxon when no holotype, syntypes, hapantotypes or lectotype exists. In so doing neotypification inevitably defines the taxon's range of morphological variability, normally by restricting it to a greater or lesser degree. To permit the designation of a neotype from material originating in a continent other than that of the original place of collection might lead to its being challenged at a later stage, on the grounds that material from nearer to the type locality was excluded from the newly defined circumscription. This would not aid the Code's fundamental requirement of achieving nomenclatural stability.

The tradition of designating type specimens in protistology is not strong. Although there exist original collections of slides containing specimens of taxa described and illustrated in key taxonomic works, only rarely were these slides formally designated as types by the authors describing the taxa in question: a striking example is the Penard collection at the Natural History Museum, London, (see http://internt.nhm.ac.uk/cgi-bin/perth/protists/) where individual specimens can be clearly matched with the diagrams in Penard's major work (Penard, 1922). The Natural History Museum holdings also contain the bequest material of many taxonomically active protistologists and could contain original slides which, although not designated as holotypes, hapantotypes or syntypes by the authors, represent an

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